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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314		DANIEL JR, WILLIE J

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2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 November 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

    4a) Of the above claim(s) *13 and 14* is/are withdrawn from consideration.

5)☒ Claim(s) *8* is/are allowed.

6)☒ Claim(s) *1-7 and 9-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)   Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on 27 November 2006. **Claims 1-12 are now pending** in the present application and **claims 13-14** are withdrawn (i.e., non-elected). This office action is made **Final**.

Claim Objections

2. The objection applied to the claims is withdrawn, as the proposed claim corrections are approved.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Suzuki (US 6,256,356 B1)** in view of **Flammer, III et al.** (hereinafter Flammer) (**US 5,515,369**) and **Almgren et al.** (hereinafter Almgren) "**Adaptive Channel Allocation in TACS**".

Regarding **claim 1**, Suzuki discloses a method for dynamic allocation of transmission resources to a plurality of communications between a base station and a plurality of mobile terminals, each resource consisting of a plurality of possible values, an control section (20) which reads on the claimed "allocation controller" associated with the base station, referred to as the fast allocation controller (20), being able to allocate to the said communications

only certain combinations of possible values, referred to as available resources (see col. 8,
line 66 - col. 9, line 22; col. 10, line 60 - col. 12, line 21; Figs. 2-5B), where the resources
(e.g., band and time slots) of the system are allocated to communications with the base
station and terminal units. Suzuki does not specifically disclose having the feature wherein
said fast allocation controller generates a pseudo-random sequence and performs allocation at
a regular interval by selecting at least one available resource for each of a plurality of
communications between the base station and the plurality of mobile terminals at a start of
each regular interval according to a value of the pseudo-random sequence. However, the
examiner maintains that the feature wherein said fast allocation controller generates a
pseudo-random sequence and performs allocation by selecting at least one available resource
for each according to a value of the pseudo-random sequence was well known in the art, as
taught by Flammer.

In the same field of endeavor, Flammer discloses the feature wherein said pseudo-
random number generator which reads on the claimed "fast allocation controller" generates a
pseudo-random sequence and performs allocation by selecting at least one available resource
for each according to a value of the said pseudo-random sequence (see col. 4, lines 36-62;
Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time
the invention was made to combine the teachings of Suzuki and Flammer to have the feature
wherein said fast allocation controller generates a pseudo-random sequence and performs
allocation by selecting at least one available resource for each according to a value of the
pseudo-random sequence, in order to allocate resources according to the useable channels, as

taught by Flammer. The combination of Suzuki and Flammer does not specifically disclose

having the feature performs allocation at a regular interval by selecting at least one available

resource for each of a plurality of communications between the base station and the plurality

of mobile terminals at a start of each regular interval. However, the examiner maintains that

the feature performs allocation at a regular interval by selecting at least one available

resource for each of a plurality of communications between the base station and the plurality

of mobile terminals at a start of each regular interval was well known in the art, as taught by

Almgren.

In the same field of endeavor, Almgren discloses the feature performs allocation at a

regular interval (e.g., time period) by selecting at least one available resource for each of a

plurality of communications between the base station and the plurality of mobile terminals at

a start of each regular interval (e.g., time period) (see pg. 1518, right col., section II. C, lines

15-26; pg. 1517, right col., section I., lines 8-12; pg. 1517, left col., abstract, lines 15-17),

where the system for allocation has a slow ACA which uses a larger time constant such as

few hours or several days and a fast ACA which uses a short time constant to allocate

channel assignment for arriving calls.

Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teachings of Suzuki, Flammer, and Almgren to have

the feature performs allocation at a regular interval by selecting at least one available

resource for each of a plurality of communications between the base station and the plurality

of mobile terminals at a start of each regular interval, in order to eliminate frequency

planning, to increase capacity, and improve the quality of the system, as taught by Almgren (see pg. 1517, left col., abstract, lines 3-5).

Regarding **claim 2**, Suzuki as applied to claim 1 discloses of the feature wherein combination of available resources are allocated (see col. 8, line 66 - col. 9, line 22; col. 10, line 60 - col. 12, line 21; Figs. 2-5B), where the resources combination (e.g., frequency band and time slots) of the system are allocated to communications with the base station and terminal units. Suzuki does not specifically disclose having the feature further comprising sequentially indexing each of the available resources for each regular interval and available resources is allocated if an index is equal to a value in the pseudo-random sequence. However, the examiner maintains that the feature further comprising sequentially indexing each of the available resources and available resources is allocated if an index is equal to a value in the pseudo-random sequence was well known in the art, as taught by Flammer.

Flammer further discloses the feature further comprising sequentially indexing each of the available resources and available resources is allocated if an index is equal to a value in the pseudo-random sequence (see col. 4, lines 36-62; Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Suzuki and Flammer to have the feature further comprising sequentially indexing each of the available resources and available resources is allocated if an index is equal to a value in the pseudo-random sequence, in order to allocate resources according to the useable channels, as taught by Flammer. The combination of Suzuki and Flammer does not specifically disclose having the feature indexing each of the available resources for each regular interval. However, the examiner

maintains that the feature indexing each of the available resources for each regular interval was well known in the art, as taught by Almgren.

Almgren further discloses the feature indexing each of the available resources for each regular interval (e.g., time period) (see pg. 1518, right col., section II. C, lines 15-26; pg. 1517, right col., section I., lines 8-12; pg. 1517, left col., abstract, lines 15-17), where the system for allocation has a slow ACA which uses a larger time constant such as few hours or several days and a fast ACA which uses a short time constant to allocate channel assignment.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Suzuki, Flammer, and Almgren to have the feature indexing each of the available resources for each regular interval, in order to eliminate frequency planning, to increase capacity, and improve the quality of the system, as taught by Almgren (see pg. 1517, left col., abstract, lines 3-5).

Regarding **claim 3**, Suzuki as applied to claim 1 discloses of the feature further comprising transmitting parameters for generating the pseudo-random sequence from the base station to the terminal units which reads on the claimed "mobile terminals" (see col. 9, lines 13-22; col. 10, lines 18-40; Figs. 2-5). Suzuki does not specifically disclose having the feature generating pseudo-random sequence by the mobile terminals from the generation parameters. However, the examiner maintains that the feature generating pseudo-random sequence by the mobile terminals from the generation parameters was well known in the art, as taught by Flammer.

Flammer further discloses the feature generating pseudo-random sequence by the

target node which reads on the claimed "mobile terminals" from the generation parameters

(see col. 3, line 52 - col. 4, line 9; col. 4, lines 28-62; Figs. 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teachings of Suzuki, Flammer, and Almgren to have

the feature generating pseudo-random sequence by the mobile terminals from the generation

parameters, in order to allocate resources according to the useable channels, as taught by

Flammer.

Regarding **claim 4**, the combination of Suzuki and Flammer discloses every

limitation claimed, as applied above (see claim 1), in addition Suzuki further discloses

wherein the transmission resources of a plurality of adjacent base stations (see col. 2, line 62-

64; col. 3, lines 29-32; Figs. 6-7), where the system has multiple base stations to allocate

resources to the mobile stations in which the plurality of adjacent base stations would be

inherent in a cellular radio telephone system. Also, a controller would be inherent for

controlling the base stations. The combination of Suzuki and Flammer does not specifically

disclose having the feature base stations are controlled by a slow allocation controller, the

resources available for each base station are determined regularly, at a first frequency, by the

said slow allocation controller and transmitted by the slow allocation controller to the fast

allocation controllers associated with the said base stations. However, the examiner

maintains that the feature base stations are controlled by a slow allocation controller, the

resources available for each base station are determined regularly, at a first frequency, by the

said slow allocation controller and transmitted by the slow allocation controller to the fast

allocation controllers associated with the said base stations was well known in the art, as taught by Almgren.

In the same field of endeavor, Almgren discloses the feature base stations are controlled by a slow ACA algorithm which reads on the claimed "slow allocation controller", the resources available for each base station are determined regularly, at a first frequency, by the said slow allocation controller and transmitted by the slow allocation controller to the fast ACA algorithm which reads on the claimed "fast allocation controllers" associated with the said base stations (see pg. 1518, right col. section C, lines 1-15; left col., section B; 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Suzuki, Flammer, and Almgren to have the feature base stations are controlled by a slow allocation controller, the resources available for each base station are determined regularly, at a first frequency, by the said slow allocation controller and transmitted by the slow allocation controller to the fast allocation controllers associated with the said base stations, in order to eliminate frequency planning, to increase capacity, and improve the quality of the system, as taught by Almgren (see pg. 1517, left col., abstract, lines 3-5).

Regarding **claim 5**, the combination of Suzuki, Flammer, and Almgren discloses every limitation claimed, as applied above (see claim 1), in addition Suzuki further discloses the method according to claim 1, further comprising an item (e.g., data) of information supplying the resources available at a base station to the mobile terminals which it serves (see col. 6, lines 32-37; col. 7, lines 1-10; cold. 8, line 66 - col. 9, line 22; Figs. 6-7), where the data required for assigning resources is transmitted to the terminal units.

Regarding **claim 6**, the combination of Suzuki, Flammer, and Almgren as applied to claim 1 does not specifically disclose having the feature wherein the performing the allocation allocates the resources available at the base station at a second frequency corresponding to the regular interval, the second frequency higher than the first frequency. However, the examiner maintains that the feature wherein the performing the allocation allocates the resources available at the base station at a second frequency corresponding to the regular interval, the second frequency higher than the first frequency was well known in the art, as taught by Almgren.

Almgren further discloses the feature wherein the performing the allocation allocates the resources available at the base station at a second frequency (e.g., short term) corresponding to the regular interval, the second frequency higher than the first frequency (e.g., long time period) (see pg. 1518, right col., section II. C, lines 15-26; pg. 1517, right col., section I., lines 8-12; pg. 1517, left.col., abstract, lines 15-17), where the system for allocation has a slow ACA which uses a larger time constant such as few hours or several days and a fast ACA which uses a short time constant to allocate channel assignment for arriving calls.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Suzuki, Flammer, and Almgren to have the feature wherein the performing the allocation allocates the resources available at the base station at a second frequency corresponding to the regular interval, the second frequency higher than the first frequency, in order to eliminate frequency planning, to increase capacity,

and improve the quality of the system, as taught by Almgren (see pg. 1517, left col., abstract, lines 3-5).

Regarding **claim 7**, the combination of Suzuki, Flammer, and Almgren discloses every limitation claimed, as applied above (see claim 1), in addition Suzuki further discloses wherein the resources include at least one of transmission time slots, spectral spreading codes intended to separate the different communications and transmission frequencies (see col. 3, lines 29-38, 50-59; Figs. 3 and 5A-B).

Regarding **claim 11**, Suzuki discloses a communication system including:

a plurality of adjacent base stations including a base station (see col. 2, line 62-64; col. 3, lines 29-32; Figs. 6-7), where the system has multiple base stations to allocate resources to the mobile stations in which the plurality of adjacent base stations would be inherent in a cellular radio telephone system;

a plurality of mobile terminals, each mobile terminal having a communication transmitted from the base station in the plurality of adjacent base stations (see col. 2, line 62-64; col. 3, lines 29-32; Figs. 6-7), where the system has multiple base stations to allocate resources to the mobile stations in which the plurality of adjacent base stations would be inherent in a cellular radio telephone system;

a plurality of transmission resources, each transmission resource including a plurality of possible values that may be allocated to the communications of the plurality mobile terminals (see col. 8, line 66 - col. 9, line 22; col. 10, line 60 - col. 12, line 21; Figs. 2-5B), where the resources (e.g., band and time slots) of the system are allocated to communications with the base station and terminal units;

said base station further configured to transmit a first communication to a first terminal in

the plurality of mobile terminals and a second communication to a second terminal in the

plurality of mobile terminals according to the allocated resources (see col. 8, line 66 - col. 9,

line 22; col. 10, line 60 - col. 12, line 21; Figs. 2-5B), where the resources (e.g., band and

time slots) of the system are allocated to communications with the base station and terminal

units in which the first and second terminal units using a first and second communication

would be inherent for the base station to communicate with different terminal units. Suzuki

does not specifically disclose having the feature a fast allocation controller associated with

the base station and configured to generate a pseudo-random sequence at a first regular

interval, transmit a seed for each first regular interval for generating the pseudo-random

sequence to the plurality of mobile terminals, and allocate at a start of each first regular

interval the available resources to each communication in the plurality of communications

from the base station to the plurality of mobile terminals according to a value of the pseudo-

random sequence; a slow allocation controller configured to determine, at a second regular

interval, available resources for each base station, the available resources including a subset

of the possible values, said slow allocation controller further configured to transmit the

available resources to the fast allocation controller, said second regular interval longer than

said first regular interval; and said mobile terminals further configured to generate the

pseudo-random sequence from the seed. However, the examiner maintains that the feature a

fast allocation controller associated with the base station and configured to generate a

pseudo-random sequence at a first regular interval, transmit a seed for each first regular

interval for generating the pseudo-random sequence to the plurality of mobile terminals, and

allocate the available resources to each communication in the plurality of communications

from the base station to the plurality of mobile terminals according to a value of the pseudo-

random sequence ; and said mobile terminals further configured to generate the pseudo-

random sequence from the seed was well known in the art, as taught by Flammer.

Flammer further discloses the feature a fast allocation controller associated with the

base station and configured to generate a pseudo-random sequence at a first regular interval,

transmit a seed for each first regular interval for generating the pseudo-random sequence to

the plurality of mobile terminals, and allocate the available resources to each communication

in the plurality of communications from the base station to the plurality of mobile terminals

according to a value of the pseudo-random sequence (see col. 4, lines 36-62; Fig. 2);

said mobile terminals further configured to generate the pseudo-random sequence from

the seed (see col. 3, line 52 - col. 4, line 9; col. 4, lines 28-62; Figs. 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teachings of Suzuki and Flammer to have the feature

a fast allocation controller associated with the base station and configured to generate a

pseudo-random sequence at a first regular interval, transmit a seed for each first regular

interval for generating the pseudo-random sequence to the plurality of mobile terminals, and

allocate the available resources to each communication in the plurality of communications

from the base station to the plurality of mobile terminals according to a value of the pseudo-

random sequence; and said mobile terminals further configured to generate the pseudo-

random sequence from the seed, in order to allow individualized seamless elimination of

inoperable channels from a particular node's band plan, as taught by Flammer (see col. 2,

lines 59-62). The combination of Suzuki and Flammer does not specifically disclose having
the features a fast allocation controller associated with the base station and configured to
allocate at a start of each first regular interval; a slow allocation controller configured to
determine, at a second regular interval, available resources for each base station, the available
resources including a subset of the possible values, said slow allocation controller further
configured to transmit the available resources to the fast allocation controller, said second
regular interval longer than said first regular interval. However, the examiner maintains that
the features a fast allocation controller associated with the base station and configured to
allocate at a start of each first regular interval; a slow allocation controller configured to
determine, at a second regular interval, available resources for each base station, the available
resources including a subset of the possible values, said slow allocation controller further
configured to transmit the available resources to the fast allocation controller, said second
regular interval longer than said first regular interval was well known in the art, as taught by
Almgren.

Almgren further discloses the features a fast allocation controller associated with the
base station and configured to allocate at a start of each first regular interval (e.g., time
period) (see pg. 1518, right col., section II. C, lines 15-26; pg. 1517, right col., section I.,
lines 8-12; pg. 1517, left col., abstract, lines 15-17), where the system for allocation has a
slow ACA which uses a larger time constant such as few hours or several days and a fast
ACA which uses a short time constant to allocate channel assignment;

a slow allocation controller configured to determine, at a second regular interval,
available resources for each base station, the available resources including a subset of the

possible values, said slow allocation controller further configured to transmit the available

resources to the fast allocation controller, said second regular interval longer than said first

regular interval (see pg. 1518, right col. section C, lines 1-15; left col., section B; 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teachings of Suzuki, Flammer, and Almgren to have

the features a fast allocation controller associated with the base station and configured to

allocate at a start of each first regular interval; a slow allocation controller configured to

determine, at a second regular interval, available resources for each base station, the available

resources including a subset of the possible values, said slow allocation controller further

configured to transmit the available resources to the fast allocation controller, said second

regular interval longer than said first regular interval, in order to eliminate frequency

planning, to increase capacity, and improve the quality of the system, as taught by Almgren

(see pg. 1517, left col., abstract, lines 3-5).

Regarding **claim 12**, the claim is rejected for the same reasons as set forth above in

the rejection of claim 11.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Suzuki (US**

6,256,356 B1) in view of **Flammer, III et al.** (hereinafter Flammer) **(US 5,515,369)** and

Almgren et al. (hereinafter Almgren) "**Adaptive Channel Allocation in TACS**" as applied

to claim 7 above, and further in view of **Jamal et al.** (hereinafter Jamal) **(US 6,724,813 B1)**

and **Bartolome Pascual et al.** (hereinafter Bartolome) **(US 6,587,449 B1)**.

Regarding **claim 9**, the combination of Suzuki, Flammer, and Almgren discloses

every limitation claimed as applied above in claim 7. The combination of Suzuki, Flammer,

and Almgren does not specifically disclose having the feature wherein each base station and

the mobile terminals form a portion of a UTRA-TDD mobile telecommunication system, a

first subset of available resources is dedicated to uplink communications and a second subset

of available resources is dedicated to downlink communications, and wherein the allocating

allocates the available resources of the first subset to the uplink communications

independently of allocating the available resources of the second subset to the downlink

communications. However, the examiner maintains that the feature wherein each base

station and the mobile terminals form a portion of a UTRA-TDD mobile telecommunication

system was well known in the art, as taught by Jamal.

In the same field of endeavor, Jamal discloses the feature wherein each base station

(28) and the CDMA radio transceiver (30) which reads on the claimed "mobile terminals"

form a portion of a UTRA-TDD mobile telecommunication system (see col. 4, lines 49-67;

Fig. 1)

Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teachings of Suzuki, Flammer, Almgren, and Jamal

to have the feature wherein each base station and the mobile terminals form a portion of a

UTRA-TDD mobile telecommunication system, in order to efficiently allocate

communication resources, as taught by Jamal (see col. 2, lines 46-47). The combination of

Suzuki, Flammer, Almgren, and Jamal does not specifically disclose having the feature a first

subset of available resources is dedicated to uplink communications and a second subset of

available resources is dedicated to downlink communications, and wherein the allocating

allocates the available resources of the first subset to the uplink communications

independently of allocating the available resources of the second subset to the downlink

communications. However, the examiner maintains that the feature a first subset of available

resources is dedicated to uplink communications and a second subset of available resources

is dedicated to downlink communications, and wherein the allocating allocates the available

resources of the first subset to the uplink communications independently of allocating the

available resources of the second subset to the downlink communications was well known in

the art, as taught by Bartolome.

In the same field of endeavor, Bartolome discloses the feature a first subset of

available resources is dedicated to uplink communications and a second subset of available

resources is dedicated to downlink communications, and wherein the allocating allocates the

available resources of the first subset to the uplink communications independently of

allocating the available resources of the second subset to the downlink communications (see

col. 4, lines 10-17, 22-38; Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teachings of Suzuki, Flammer, Almgren, Jamal, and

Bartolome to have the feature a first subset of available resources is dedicated to uplink

communications and a second subset of available resources is dedicated to downlink

communications, and wherein the allocating allocates the available resources of the first

subset to the uplink communications independently of allocating the available resources of

the second subset to the downlink communications, in order to dynamically distribute the

radio channels of a TD-CDMA radio communications system, as taught by Bartolome (see

col. 2, lines 30-34).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Suzuki (US**

6,256,356 B1) in view of **Flammer, III et al.** (hereinafter Flammer) **(US 5,515,369)** and

Almgren et al. (hereinafter Almgren) **"Adaptive Channel Allocation in TACS"** as applied

to claim 3 above, and further in view of **Jamal et al.** (hereinafter Jamal) **(US 6,724,813 B1)**.

Regarding **claim 10**, the combination of Suzuki, Flammer, and Almgren discloses

every limitation claimed as applied above in claim 3. The combination of Suzuki, Flammer,

and Almgren does not specifically disclose having the feature wherein the transmitting

transmits the parameters for generating the pseudo-random sequence over the common

control channel BCH. However, the examiner maintains that the feature wherein the

transmitting transmits the parameters for generating the pseudo-random sequence over the

common control channel BCH was well known in the art, as taught by Jamal.

Jamal further discloses the feature wherein the transmitting transmits the parameters

for generating the pseudo-random sequence over the common control channel BCH (see col.

6, lines 11-14; col. 8, lines 10-14, 20-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teachings of Suzuki, Flammer, Almgren, and Jamal

to have the feature wherein the transmitting transmits the parameters for generating the

pseudo-random sequence over the common control channel BCH, in order to efficiently

allocate communication resources, as taught by Jamal (see col. 2, lines 46-47).

Allowable Subject Matter

4. **Claim 8** is objected to as being dependent upon a rejected base claim, but would be

allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims.

Response to Arguments

5.   Applicant's arguments filed 27 November 2006 have been fully considered but they

are not persuasive.

The Examiner respectfully disagrees with applicant's arguments as the applied

reference(s) provide more than adequate support and to further clarify (see the above claims

and comments in this section).

6.   In response to applicant's arguments against the references individually, one cannot

show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In*

re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding applicant's arguments of claim 1 on pg. 8, 4th paragraph, "...do not

describe the feature that the fast allocation controller *performs allocation at a regular*

interval...", the Examiner respectfully disagrees. The combination of Suzuki, Flammer, and

Almgren teaches said feature, in particular Almgren discloses the feature the fast allocation

controller performs allocation at a regular interval (e.g., time period) by selecting at least one

available resource for each of a plurality of communications between the base station and the

plurality of mobile terminals at a start of each regular interval (e.g., time period) (see pg.

1518, right col., section II. C, lines 15-26; pg. 1517, right col., section I., lines 8-12; pg.

1517, left col., abstract, lines 15-17), where the system for allocation has a slow ACA which

uses a larger time constant such as few hours up to several days and a fast ACA which uses a

short time constant to allocate channel assignment for arriving calls. The time constant

represents a constant time that is regularly used by the system which directly and clearly

corresponds to a regular interval. Since the slow ACA allocates channels to the fast ACA, one of ordinary skill in the art would clearly recognize that the slow ACA would utilize a longer time (or not a shorter time) than the fast ACA in order for the system to optimally adapt or adjust to network issues.

7.   Applicant amended the claim language but failed to provide support (i.e., page(s), line(s), and drawing(s)) for the newly amended claim language. The Examiner requests applicant to provide support for the response filed 27 November 2006 and any further amended claim language.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

   a. Ozluturk (US 6,754,497 B1) discloses seamless handoff system and method.

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (571) 272-

7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information

for unpublished applications is available through Private PAIR only. For more information

about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on

access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-

9197 (toll-free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-9199 (IN USA

OR CANADA) or 571-272-1000.

/WJD,JR/

WJD,JR
06 February 2007

CHARLES APPIAH
PRIMARY EXAMINER